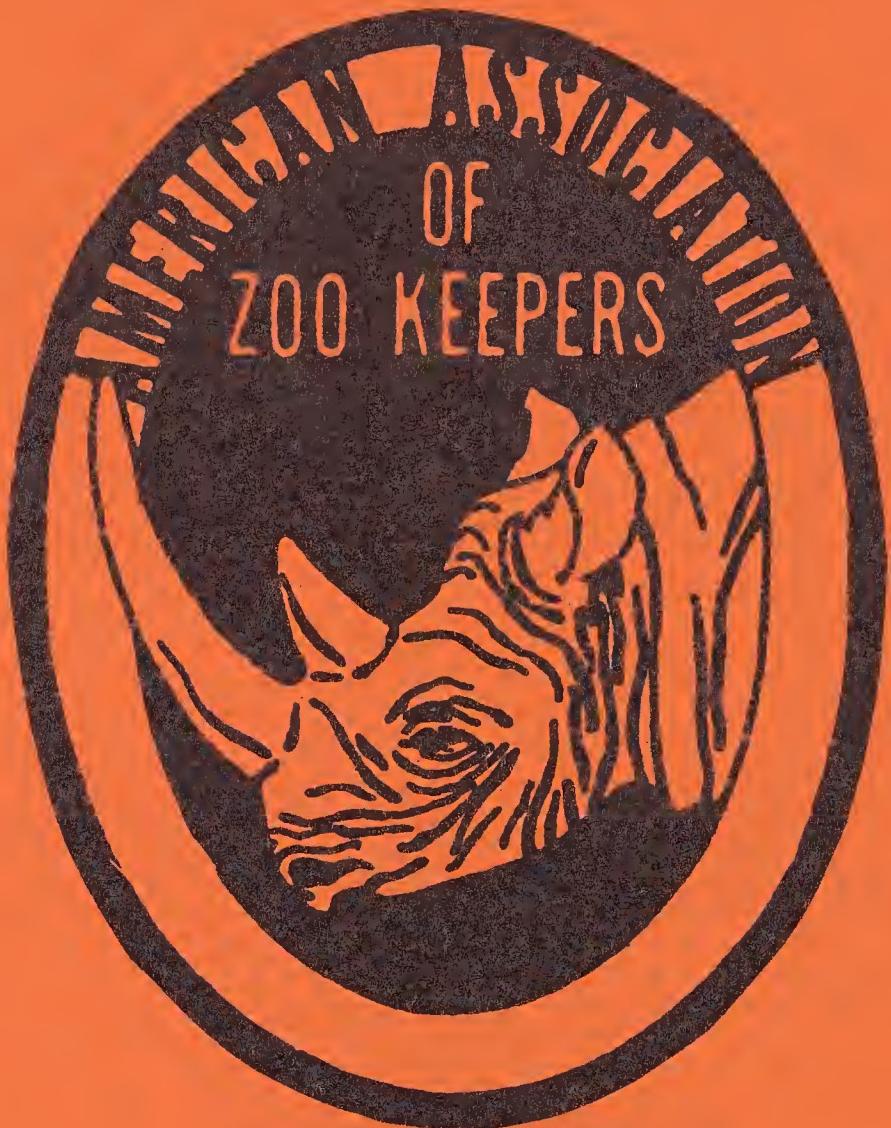


THE KEEPER

BÉLA J. DEMETER

AAZK BULLETIN



September/October 1973

American Association of Zoo Keepers

AMERICAN ASSOCIATION OF ZOO KEEPERS

NATIONAL HEADQUARTERS

8024 Tommy Drive

San Diego, California 92119

(714) 463-0738

Board of Directors

Richard Sweeney, San Diego, Cal.
Perry Alexander, Fresno, Cal.
Ken Kennedy, Vancouver, Canada
Ed Roberts, Stone Park, Mass.
Sam LaMalfa, Milwaukee, Wis.
Gerald Thomas, San Diego, Cal.

Honorary Members

Dr. Jean Delacour
Gloria Stewart
James M. Stewart
Ivan Sanderson
R. Marlin Perkins
Marvin L. Jones
Efrem Zimbalist, Jr.
Mrs. E. Zimbalist, Jr.

Regional Coordinators

Rick Steenberg, St. Paul, Minn.
Maurice Peterson, Madison, Wis.
James Hunter, Boston, Mass.
Mickey Barrett, San Diego, Calif.
Greame Mackendrich, Winnipeg, Canada
Randall Reid, Birmingham, Ala.
Dennis Jacobs, Memphis, Tenn.
Curt Williams, Boise, Idaho

Award Chairman

John A. Siegel

AAZK-AAZPA Liaison Committee

Randall Reid, Chairman

AAZK MEMBERSHIP -- DUES INFORMATION

Affiliate (Keepers)	.....	\$10.00 Annually
Associate	.....	\$10.00 Annually
Foreign	.....	\$10.00 Annually
Student	.....	\$ 5.00 Annually
Contributing	.....	\$25.00 Annually
Supporting Life	.....	\$200.00

All Memberships include subscription to THE KEEPER.

AAZK Shoulder Patches are also available at \$1.00 each.

Address all AAZK Membership correspondance to AAZK Headquarters, 8024 Tommy Drive, San Diego, California 92119.

THE KEEPER
NATIONAL AAZK BULLETIN



September/October 1973

Vol. 6, Nos. 9 & 10

TABLE OF CONTENTS

Editorial	100
Milwaukee Polar Bears by Bob Hoffman	101
Concepts of Zoo Construction by Phil King and Graeme MacKendrick	103
Birth of Twin Nilgais by Pat Stout	106
Director Dialogue - Animal Technicians by Lawrence Curtis	109
Keeper's Korner by Ed Roberts	111
Data Pool - Keeper Survey (Edited by Pat Sammarco)	113
National AAZK Communique by Dick Sweeney	115
Behind the Guardrail (Edited by Larry Sammarco)	116
1974 Tri-Zoo AAZK Conference	118

THE KEEPER, the official national publication of the American Association of Zoo Keepers, is published six times a year.

All AAZK Memberships include a subscription to THE KEEPER. Single copies, \$1.00. Opinions expressed by authors are their own and do not necessarily reflect the policy of the American Association of Zoo Keepers.

Editorial and Advertising Offices:

THE KEEPER
186 West Quincy
Riverside, Illinois 60546

Editorial Staff

Dewey Garvey, Editor
Gay Kuester, Associate Editor
Larry Sammarco, Associate Editor
Pat Sammarco, Associate Editor
Pat Sass, Associate Editor
Pat Stout, Associate Editor

Editorial Advisors

Phil Cihlar & Maureen McLaughlin
Brookfield Zoo, Chicago Zoological Park

EDITORIAL

Dear Members:

Please be reminded that national dues for AAZK become delinquent after January 1, 1974. Your prompt renewals will enable us to provide good services in the new year.

We are grateful to those who have taken advantage of our "Early-Bird" renewal and hope to receive yours soon.

Any and all information on raising Lemur's in captivity is needed by Mr. Andy Vernon, President, Memphis Zoo Chapter of AAZK. If you have some information on cage set-up, food, companionship, cycles, etc., please forward this to Andy at Overton Park Zoo, Memphis Tenn. 38112.

International Zoo News from Woudenberg, Holland, will discontinue publication at the end of 1973. Mr. G. Th. van Dam, Editor, gives personal health for the reason that he must discontinue his worthy publication. This newsletter will be missed by zoo people throughout the world. AAZK wishes Mr. van Dam a speedy recovery and extends best wishes for the future.

If you have any questions regarding subscriptions, etc., please direct all inquiries to Mr. van Dam, International Zoo News, Zoo Centrum, Woudenberg, Holland.

Your response is needed to articles written in THE KEEPER. Your opinion is valued by these authors and they can re-evaluate their material with your reply. THE KEEPER is a valuable means of communication between keepers, and I hope everyone will take advantage of it.

Editor

I would like to add something on Phil King's and Graeme MacKendrick's article on Zoo Construction. Keepers have been given some consideration on cage designs at the Brookfield Zoo. Brookfield Keepers have presented ideas on the Small Antelope House which is to be renovated, an outside cheetah run and the proposed African Waterhole Exhibit. Keepers in the Reptile and Small Mammal Houses have designed and built many of their own animal enclosures. Most notably Keeper Mary Jo Fleming, in cooperation with Curator Chris Wemmer, designed a completely new tunnelled mound structure for meerkats which was also built with the help of other Small Mammal Keepers.

The situation concerning Keepers' influence on cage construction at Brookfield certainly isn't perfect, but does appear to be improving. At least, it is a beginning.

Denny Grimm
Brookfield Zoo



Milwaukee's Polar Bears

by Bob Hoffman, Milwaukee Zoo

The following is an excerpt from L. S. Crandall's "Management of Wild Animals in Captivity", page 304.

"The history of the Milwaukee polars has been well documented (heller, 1930; Speidel, 1949; Anon., 1953). Some slight diserepancies and omissions in these reports have been adjusted and results brought up to the date of March 27, 1957 (in. litt.), by George Speidel, director of the Washington Park Zoological Garden, to whom I am greatly indebted. Four cubs, three males and one female, presumably born in November or December, 1911, were captured on the coast of Greenland and arrived in Milwaukee on August 12, 1912. They lived peaceably together as they grew, one of the males, called "Silver King," gradually becoming dominant. The female, "Sultana", first became cyclic in the Spring of 1919, at the apparent age of 7 years and 4 or 5 months. She then mated with Silver King, the two other males maintaining a respectful distance, a situation similar to that of the Chicago Kodiaks. In the autumn of that year, Sultana became dormant, for the first time, in a den from which the males could be excluded and on December 2, 1919, gave birth to a single cub. This cub was successfully reared and was believed to have been the first polar bear to be reared in captivity. From then until 1935 Sultana continued to produce one or two cubs, in alternate years, in November or December, twelve in all. Of these, she reared eleven, only the last, born on December 27, 1935, failing to survive. Silver King sired the first seven of Sultana's cubs, and after his death on October 16, 1928, the second male, "Borealis", took his place, siring the last five young.

The third of the original males, "Clown", was shot after having escaped from his enclosure on April 11, 1921. But Borealis lived until April 19, 1939, when he was killed by a younger male. It appears, then, that Sultana was not mateless following the loss of her last cub in 1935, but in any case, she produced no more up to April 13, 1947, when she was destroyed.

A female named "Sultana II", daughter of Borealis and Sultana, born December 5, 1931, produced her first cub on November 29, 1944, having been mated with her brother, "Borealis II", born December 12, 1929. Five single cubs were born to this pair in alternate years, the last on December 3, 1952, and all were reared by the mother. The parents were still living in 1957, but there were no further births. The female, born November 29, 1944, known as "Cirrus", having been paired to her father, Borealis II, gave birth to a single cub on December 3, 1955. Efforts to rear

this youngster by hand were unsuccessful, and it died on December 16, 1955. It did, however, represent the third generation born in Milwaukee. In all, from 1919 to 1955, eighteen cubs were produced and sixteen fully reared. Six members of this family were still living in 1957."

From 1957 thru February, 1973, six cubs were born, four of which were reared by their mothers. A set of twins, born December 1969, lived only one month.

Sultana II gave birth to a single female cub, "Bartlett", on November 23, 1946. Borealis II was the father of that cub. Sultana II and Borealis II were parents to Artiste, a male cub born November 12, 1948. On October 29, 1957, Sultana II and Borealis II were sold.

Male, Artiste, mated with Cirrus and Bartlett and two female cubs were born. Cirrus gave birth to Hawaii on November 28, 1958 and Bartlett to Alaska on November 14, 1958.

Artiste again sired twin cubs born to Cirrus on December 11, 1969 and one female cub "Spunky" to Bartlett on December 5, 1961. The twins died January 4, 1970. On August 2, 1971, Bartlett died.

On December 4, 1971, Frosty a male cub, was born to Artiste and Spunky.

This accounts for all the polar bears residing at the Milwaukee County Zoo excluding Artiste, who died January 21, 1973. Total — four females and one male.

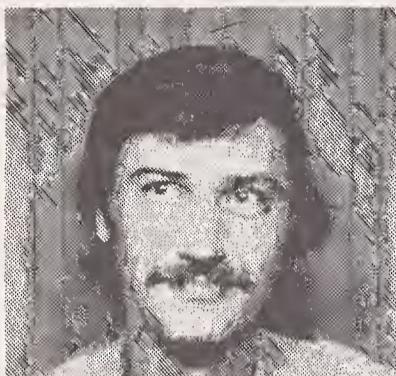
As in keeping with our zoo's concept, the polars are kept in a predator-prey relationship and continental grouping. The rock work is simulated granite. A pool is provided approximately 30 feet long, 10 feet wide and 8 feet deep. The two inside maternity dens measure 15 x 15 feet. Outside maternity dens are the same measurements. There is a pool 8-feet long, 5-feet wide and 6-feet deep in each outside maternity den.

Towards the end of November, the inside maternity cages are strawed down. There is no heat in the building. Strict seclusion is maintained. The pools for the outside maternity dens are drained. Feeding of the expectant pregnant females is done in the outside maternity cages.

Their diet consists of carrots, apples, bread, fish and horsemeat. Supplements to their diet are wheat germ oil and cod liver oil. In the summer, they fast one day a week. In winter, their food supply is cut down to half and fed three days a week.

My thanks to Richard Pollnow and John Milewski, area supervisors for their helpful information which aided me in writing this article. Anyone wishing more information on our polars, can contact myself, Dick or John.

Thanks to the University of Chicago Press for permission to reprint the above excerpt from Lee S. Crandall's "Management of Wild Animals in Captivity".



Concepts of Zoo Construction

by Phil King and Graeme MacKendrick
Assiniboine Park Zoo, Winnipeg



Since the very early days of zookeeping, ideas and opinions as to the way animals should be displayed, and in fact why they should be displayed at all, have varied considerably and are still changing nowadays.

The first zoo, or perhaps should we say, organized essemblage of animals, is generally considered to be that of Emperor Wen in 1,100 B.C. Known as a "Park of Intelligence" which conjures up, perhaps, a part of the modern-day concept of zoos, this collection was apparently not open to public viewing. There was also an apparent lack of scientific research, and the word "Intelligence" as read in the title could have possibly been translated to mean "wonderment" or "curiosity".

Before this time, many rulers had built up their own private collections, but they were, it seems, flights of fancy, and animals were one of the commodities of ownership used by these monarchs to show their own power and resourcefulness.

After Emperor Wen, still more monarchs were collecting animals but to a much greater degree, until about 300 B.C. when research and experimental studies, however crude, were begun by the Greeks. Then came the Romans, whose reasons for keeping animals were, it seems, purely of entertainment. These animals were kept mainly for "games" or for the roasting pit and efforts to maintain them were taken only from their arrival until their intended departure. A break from tradition began here, however, in that they were on exhibit to the public. In fact, an admission charge was in effect.

From this time, more or less, until modern times, reversal to the system of monarchs having their own collections as status symbols returned, although the cultural aspects were probably more emphasized, and of course, the varieties of animals on exhibit probably increased.

The age of explorers was now well underway and many new and unknown animals were being brought back. In 1519, an amazing discovery was made by Hernando Cortez in Mexico. He found a zoo — Montezuma's great menagerie, which was remarkably modern, including large flight cages for birds of prey and an extensive reptile collection. The daily food consumption included 500 turkeys and the zoo was staffed by 300 keepers.

There is much controversy as to which is the oldest existing zoo. Some contenders are Le Jardin des Plantes in Paris, founded as a medieval herb garden in 1626, to which animals were added in 1794, after the zoo Le Jardin des Roi was pillaged during the French Revolution. Another is Schonbrunn at Vienna, founded in 1752 by Emperor Franz I, as a royal menagerie; and London, founded in 1826,

from an idea first formulated ten years earlier. The latter is probably the oldest existing zoo which began in the style in which it meant to continue—a zoo. The United States had to wait until 1864 when Central Park Zoo was opened in New York, and Canada until 1887 when Riverdale Zoo in Toronto was opened. By this time, of course, the zoo was becoming a household word, and things had no where to go but up.

Now, obviously, styles of displaying the animals must have changed, perhaps as much as the opinions of the powers that be as to why animals should be displayed at all. Some zoos started with what we like to consider the real concept of an all round operation of research, entertainment and education. Others started with a purely lucrative business attitude. Unfortunately, many continue to the present day thinking in this manner.

An interesting view on these zoos is the kind of housing. It is probably time to say that in the early days, it was for the most part, pretty bad. We all know how, in the past, many zoos were made up of rows and rows of bare and most often unsanitary cages. The mortality rate of the animals in zoos was great, mainly due to the lack of knowledge concerning the animals' requirements and also the poor facilities in which animals were kept. Not to say, however, that existing knowledge was not utilized to its fullest extent.

In those times, there was little or no genuine concern for the depletion of wild animals due to commercial collecting for many reasons including the stocking of zoos. Many of these zoos prided themselves in being called Zoological Gardens. Some were, but it should have been changed to something like, "Zoological Gardens Exhibiting Imprisoned Animals". I use the word "imprisoned" because these animals were placed in completely bare cages with absolutely no environmental stimulus and served no other purpose than to imprison the animals for exhibition. Today, these "cages" have been given fancy new names, such as exhibit or enclosure. These new names mean absolutely nothing unless the cage, exhibit, enclosure or whatever one wishes to call it, satisfies the animals' requirements to the fullest extent. It is not a matter of making the exhibit look pretty, although aesthetics are important, but a matter of trying to satisfy the animal so that it will accept the exhibit as its permanent living space, without showing any displacement characteristics. This would be ideal although unfortunately is, in most cases, impossible for reasons such as lack of funds available to build such a facility or, for example, the elephant, in which case, most every elephant in captivity possesses displacement characteristics because of the necessity to restrain and work such animals. Also, the amount of money to construct a feasible elephant exhibit is not available to one zoo.

It would be foolish to even hope to construct an exhibit which would supply all an animal's biological and psychological requirements. However, we have been given or more correctly, taken upon ourselves the task of conserving wild animals in captivity and this we must do, not just for future generations of the human race, but for the animals and the fact that we are obligated to keep them alive and to provide

them with what is rightfully theirs—a place to live.

Many of the so-called great zoos, relied on architecture to beautify their charges, architecture sadly for its own sake. To make an animal building and enclosure attractive to the public, regardless of whether it suited the animal, was very much in vogue, up at least until pre-war days. This trap is very easy to fall into. In some of today's zoos where older architecture is still in evidence, I find myself admiring it and feel a little sad in the realization that it will soon, in many cases, be pulled down. In spite of this, I realize that many of these buildings are completely unfit to house animals. Perhaps the best example of this magnificent architecture was in the old Berlin Zoo. I feel great regret at never having been able to see it.

Today, we find the same thing, but perhaps on a larger scale. I have personal experience of animal buildings being torn down and being replaced by modern architectural monstrosities. They are no better than their predecessors and in some cases worse, so far as the animals are concerned. We might often be wise to ignore these glorious old facades and the often delapidated state of their external structure and compare closely the basic plan and design with those of new buildings. After fifty or sixty years, are we really planning any better, considering the accumulated knowledge we have at our finger tips?

There is no definite formula for the design of animal enclosures (one reason why we ask for your ideas). However, there are certain biological and psychological specifications necessary for each species.

In many zoos it has been the policy to cut corners to scrimp and save that little bit of money and material in order to give the animal the bare essentials and the keeper one big headache.

In these articles, we are going to concentrate on animal and keeper requirements, as these are, in our opinion, the most important. If the animals are not satisfied and the keeper not provided with a workable system, then even the most understandable public will complain and the most practical director will experience administrative problems. It all boils down to good initial planning.

The major set-back in zoo development is the lack of funds. However, a lack of sufficient financial help does not mean that the construction and landscaping should be shoddy or without quality. Quality of workmanship and material is most important in construction of any kind, if it is to be built with the purpose of lasting any length of time. When considering time, time that is expected for the building to stand with minimum maintainance and of course, renovations, one must consider geological structure of soil, damage caused by both the public and animals. The type of environment the animal might need may be detrimental to the maintenance of the structure; for example, the need for the keeper to wash the exhibit daily.

The objective of zoological planning dates back to the early 1900's, when even then, it was thought that the animals would thrive better in a natural and well-landscaped area. The public would be more pleased with what they saw, thus developing an interest into the educational aspect of the zoo. To develop this kind of environment wherein both animal and man would be content, is extremely difficult.



Birth of Twin Nilgais

By Pat Stout, Brookfield Zoo

Nilgais, the largest of the antelopes indigenous to India, normally give birth to twins. On April 6, 1971, twin male Nilgais were born at Brookfield Zoo. This is the second set of twins born to our adult pair, which were about six months old when we received them on September 26, 1968. On the morning of April 6, shortly after I arrived at work, I discovered that our female Nilgai was in the early stages of labor, and took the following notes during the course of the birth:

- 8:20 a.m. – Fetal membranes protruding. Female somewhat active; walking around calmly, eating, lying down occasionally. The female is in a stall by herself, separated from the male because we knew that she was due to give birth.
- 10:00 a.m. – Defecated.
- 10:31 a.m. – Standing, straining and defecating.
- 10:45 a.m. – Standing in right front corner of stall, straining and defecating.
- 10:52 a.m. – Lies down in left rear corner of stall.
- 11:00 a.m. – Hoof showing, mother still lying down.
- 11:21 a.m. – Still down, straining.
- 11:23 a.m. – One hoof out three inches, other hoof starting to show.
- 11:25 a.m. – Stood up; tail raised (straight out). Hooves went back in part way when she stood up.
- 11:27 a.m. – Squatting, straining; tail raised more.
- 11:28 a.m. – Moved to back of stall, head toward left corner. Walked around a little.
- 11:47 a.m. – Lies down again.
- 11:52 a.m. – Still down at rear of stall, straining; head starting to appear.
- 11:53 a.m. – Head all the way out.
- 11:54 a.m. – Calf half way out.
- 11:55 a.m. – First calf born, mother still lying down. Mother stood up seconds later and started licking calf.
- 12:03 p.m. – Mother still licking; calf raised up on front legs and tried to stand unsuccessfully.
- 12:05 p.m. – Calf stood for an instant, then fell over. Mother still licking.
- 12:07 p.m. – Mother briefly stopped licking and raised head, then resumed licking.
- 12:08 p.m. – Calf up on hind legs. Got up in front with front legs spread apart, standing wobbly. Fell down shortly after.

- 12:10 p.m. – Calf stands up again, then lies down; mother still licking calf.
- 12:12 p.m. – Mother lies down, continues with licking, and calf stands up facing mother. Falls down again.
- 12:14 p.m. – Calf up again.
- 12:15 p.m. – Calf falls again. Mother defecating. tail raised and straining; feet of second calf showing.
- 12:17 p.m. – First calf up again, mother licking.
- 12:18 p.m. – Water broke from membrane of second calf. Mother still licking.
- 12:20 p.m. – Head and both front feet out.
- 12:22 p.m. – Second calf half way out.
- 12:24 p.m. – Second calf born. Mother still licking first calf.
- 12:25 p.m. – Mother turned head to look at second calf for first time. First calf standing again, mother is continuing to lick first calf. Mother stops licking; still not paying much attention to second calf.
- 12:36 p.m. – First calf moved around to second calf. Mother stands up. First calf touches noses with second calf.
- 12:37 p.m. – Mother started licking second calf.
- 12:42 p.m. – Mother stops licking second calf and turns her attention to first calf. Second calf is still very wet.
- 12:45 p.m. – Second calf tries to stand, falls over about one minute later.
- 12:46 p.m. – Mother resumes licking second calf.
- 12:47 p.m. – Mother lies down, still licking.
- 12:50 p.m. – Second calf gets up. First calf still standing. Mother briefly stops licking second calf, to lick first.



Photo: Leland LaFrance/Brookfield Zoo

- 12:51 p.m. — Second calf falls, but gets up again (always on hind feet and front knees).
- 12:53 p.m. — Falls again, but gets up within seconds.
- 12:55 p.m. — Mother turns head to lick first calf, and second calf gets up on all fours for the first time, went down thirty seconds later; tries to get up several times, but falls down each time.
- 12:57 p.m. — Second calf up again, mother turns from licking first calf to lick second. Second calf falls down again.
- 1:00 p.m. — Both calves up; mother licking both. Mother still lying down.
- 1:23 p.m. — Mother stands up, licking both calves, both standing.
- 1:25 p.m. — Calves looking for nipples, examining area between front legs.
- 1:27 p.m. — First calf looking in right area.
- 1:28 p.m. — First calf nursing.
- 1:30 p.m. — First calf still nursing, second calf looking for nipple.
- 1:57 p.m. — Mother lies down. Second calf has not yet nursed.

Discontinued observation at 2:00 p.m., but later noticed that the second calf was nursing and that both of the twins were healthy and strong.

For comparison, see data recorded on page 95 of *The Psychology and Behavior of Animals in Zoos and Circuses*, by H. Hediger, on the birth of Nilgai twins.

**ADVANCEMENT - EDUCATION - ENJOYMENT - INVESTMENT
-WHATEVER YOUR REASON-**

RALPH CURTIS BOOKS
OFFERS THE LARGEST SELECTION OF
ZOOLOGICAL & WILDLIFE BOOKS

Those Hard-To-Find Titles
From Publishers Around the World.

RALPH
CURTIS
BOOKS

2633 Adams Street
Hollywood, Fla. 33020
Tel. (305) 925-4639
ZOOLOGICAL BOOKS

"We stock all the International Zoo Yearbooks
and hundreds of books on Zoos, Animal &
Birdkeeping, Mammals, Birds, Reptiles, Fishes,
Conservation, and similar subjects."

OUR LATEST LISTS
OF BOOKS . . .
FREE to AAZK Mem-
bers and Associates.

By Lawrence Curtis, Director, Oklahoma City Zoo

Animal keeping personnel in zoos have always been plagued with a status problem both salary-wise and title-wise. The Oklahoma City Zoo is not alone in having the majority of its animal keeping personnel officially classified in the municipal hierarchy as laborers or equivalents thereof.

And no matter the variety of sophisticated working titles we might give inside our organization to such personnel, such as junior keeper, herpeculturists, aviculturist, etc., their pay checks remained those of laborer.

In the more conventional trades, graduated pay and classification scales are reflected in the employee who drives a specialized vehicle, operates a complicated piece of equipment or is responsible for following elaborate written instructions or of recording detailed data. It has been difficult indeed to carry this principle over to the science of animal husbandry.

Shoveling feces is only one part of animal husbandry. A good animal technician must constantly observe for critical changes (often very slight) in the behavior of his charges. He must prepare specialized diets, use chemical cleaners in safe proportions, give medication under veterinary supervision, solve a myriad of problems himself and report significant ones to his supervisor, handle minor maintenance work and be able to operate equipment for heating, cleaning, etc.

The Zoo Animal Technician, unlike his laboratory counterpart, must also be able to meet with that most curious of all animals, the zoo-visiting public. And most Zoo Animal Technicians are involved on a daily basis with hazardous animals and often species of an exceedingly dangerous nature.

Until recently, we have had to assign the welfare of delicate and rare living organisms to a man drawing the same pay as the proverbial ditchdigger. It has always seemed inappropriate to assign primary care to a laborer for the welfare of several irreplaceable mountain gorillas or a group of rare golden marmosets, representing 20% of the world's captive population. The industrial trades would never do it.

Now, after several years of proselytizing municipal authorities, the Oklahoma City Zoo has turned a significant personnel corner in its classification of animal keeping personnel. In our new fiscal year's budget, laborers responsible for animal care are termed Animal Technicians; Keepers are now Senior Animal Technicians and Foremen are Animal Technician supervisors. And, perhaps most important, significantly improved pay scales and revised job classifications reflect these title changes.

We are happy and proud that our animal husbandry personnel have finally been

recognized for what they are—trained and skilled technicians operating in a professionally oriented environment of scientific animal husbandry.

And yet, even with the technological advance indicated by our reclassification, one phrase in the job descriptions stands out—the single most important characteristic we look for in our animal husbandry personnel—"empathy with animals."

Reprinted from July 1973 issue of Zoo Sounds, published by the Oklahoma City Zoo.

23-DAY KEEPER SAFARI TO AFRICA

Join others with the same interests on a fantastic photographic safari. You will be guided by a white hunter with 40 years experience in the bush. Your guide from Chicago will be Di Asch, organizer and veteran of five safaris. Your cost will be \$2,565, all inclusive, except for souvenirs, booze and film. You will live in the bush in tents, have home cooked meals and all your clothes will be washed and ironed for you. This will be a relaxed, fun-filled, educational trip of a lifetime—you need not lift a finger except to press the lever on your camera.

The safari will leave Chicago on January 31, 1975, and we will fly B.O.A.C. to Nairobi. We will be gone approximately 23 days and 19 of them will be spent in the bush, observing many of the same animals currently under your care.

For details and additional information, please contact Di Asch, 9441 S. Longwood Drive, Chicago, Illinois 60620.



INTERNATIONAL ANIMAL EXCHANGE, Inc.

AMERICA'S LEADING WILDLIFE

Importers—Exporters

Mammals—Birds

Reptiles—Amphibians

*Specializing in Sales Purchases and/or
Exchange of Animals Throughout the World*

1489 East Nine Mile Road
Ferndale, Michigan 48220
U.S.A.

Telephone: (313) 545-2820 or 545-3348
Cable Address: Bongo-Ferndale

Box 1046
Mogadiscio
Somalia
AFRICA

KEEPER'S CORNER

by Ed Roberts, Stone Park Zoo

The Keeper and Management

In my first column, we followed our hero from his inception into the world of animals and their care to the present where he finds himself a bona-fide keeper. Three years have gone by and he has managed to move his carcass from his lonely job with ungulates to other promising fields in animal keeping, or so he thinks. To begin with, he has fallen prey to one of the oldest gambits in zoo management: doubling up. Every zoo keeper knows what this is. It is a peculiar sequence of events that happens only twice a week usually on weekends, holidays, vacation time, sick days and often when some other keeper is goofing off, or has such a bad hang-over, he just can't make the day. Oh, they told him he'd have to work weekends and some holidays, but they waited a while then sprung the trap shut. They told him to vary his interests, get involved with other animals, talk to the other keepers, "get familiar on how they work and in this way you could be a good all-around man, able to be used anywhere in the zoo". Actually, this is a good thought, because mobility has its advantages. When a man gets good enough where he can take care of a number of exhibits, he makes an excellent swing man. The head keeper can call on him anytime and can rest assured that this particular man will do the job that has to be done, maybe not as perfect as the regular man, but passably so, for after all, he has other assignments including his own to take care of.

By and large, management looks very favorably on the keeper that demonstrates this outstanding ability. They'll sing out his praises and tell the world what a good man he is and never give him a dime more in his pay. They will even find ways to cut out the little overtime he could get by doubling up. Since our hero has fallen victim to this insensitivity, he starts to gripe. Hell, you can't blame him, he's doing his job and doing it well. His areas are spotless; he's on the go most of the time; sometimes he gets caught between dumping trash barrels and painting exhibits during his leisure "time". So, he figures it's all part of the whole zoological framework of the job and works with a will, never shirking an assignment.

Is management interested enough in trying to help this man get the Professionalism he is trying to obtain? Do they try and help him by offering courses to develop his knowledge on animals and endangered species entrusted to his care? Are they interested enough to find out his likes and dislikes? Do they care enough to ask about his family? Do they really want to know more about their keeper??? Most of these questions our hero has found out are answered by a NO.

He has found himself in a mood that is somewhere between lethargic routine and unenthusiastic pokiness. A dangerous situation when working around animals. Alertness is a key defense against aggressive beasts and when honed sharp, can save your life in a great many instances. Apathy slows down reaction time and can be very fatal in many exhibits. So, our friend knows he has to snap out of it. He doesn't like to bother his superiors with small annoyances, but a good head keeper will have been alert to this problem and he can and does advise our hero on what his next course of action should be. If the head keeper has any moxie at all, he will fight for this guy and try any and all means to get him what he wants.

Management must recognize that zoo people are individuals that do not work on an assembly line; they do not sell cars or deliver T.V.'s; or dig ditches (although on occasion, our hero has done just that); or pound a typewriter. They must admire the principles and loyalty that drive an animal keeper to work under conditions that no ordinary person would. It's too damn easy for management to holler, "if he's not able to hack it, get rid of him". It's never easy for management to say, "He's good, eh? Give him a raise, let's try and keep this guy, for they are few and far between; make his job secure; don't hold a guillotine over his head so the poor slob thinks that anytime something goes wrong, he's going to get the axe."

Our hero knows he has to move ahead on his own. This is his calling, most of it is going to be up to him. The zoo he works in must depend on his professional capabilities. Most of them will never admit this, but it is true just as it was 50 years ago. Maybe, thinks our man, just maybe, the light is finally beginning to dawn. Our hero certainly hopes so.

● A portion of the business meeting scheduled during the 1974 National AAZK Conference will be set aside to discuss and/or submit proposals for constitutional changes or additions. Please be reminded that all proposed constitutional questions, suggestions and proposed amendments must be submitted to Mr. Gerald Thomas, Constitutional Chairman prior to the conference. Mr. Thomas will then present the proposed changes to the Board of Directors for their consideration. Those proposals deemed necessary and appropriate will then be approved by the Board and then be submitted to the general delegation for action at the Conference.

This ruling is in accordance with Section 8 of the Constitution and Article IX of the By-Laws.

No constitutional proposals can be submitted from the floor without first being approved by the Board of Directors.

All accepted proposed constitutional or by-law changes will be printed and distributed to all attending AAZK members. Their vote on such proposed changes shall reflect a vote of the national membership.

If you want changes considered, please send them to Mr. Thomas no later than March 15, 1974. Send to: Mr. Gerald Thomas, Chairman

AAZK Constitutional Committee
3743 Brems, San Diego, Calif. 92115

ALL PROPOSALS MUST BE RECEIVED BY MARCH 15, 1974



DATA POOL

Edited by
Pat Sammarco, Lincoln Park Zoo

From the data received from the six keepers responding, the average keeper is 29 years old, with 2 years of college and has been working in only one zoo for 7 years. Five of the six are male. Having worked in at least 3 other areas in the zoo, half are content in their present runs; the rest are ready to move to other areas. Pre-keeper jobs include office clerk, freight clerk, veterinary assistant, usher, construction work, gas station attendants, zoo-train engineer and, with two votes each, pet shops and the Army.

Except for those in bird areas, where there are many more animals per area, a keeper has charge of 27 animals, fewer as their size increases. The majority of zoo keepers, even those with small cages besides, care for at least one yard or moated area. All have been injured at work, all but one by animals.

Keepers are at work at least an hour before the zoo is open to the public, and their zoos are open every day of the year, except one, which closes for Christmas Day. The daily work routine includes four hours of cleaning animal areas, an hour of animal contact, an hour and a half of diet preparation and an hour of feeding. A third of the keepers do some public area cleaning, half spend an average of two hours of public contact, and most do some record keeping. Extra duties include elephant and chimpanzee training and shows, cow milking demonstrations, hay and grain loading and some supervisory duties. When you add up the hours, it is obvious and accurate to say that many duties overlap. Most keepers will admit that unless we hide from the public, we also are available on lunch hours and breaks to answer questions and handle emergencies.

Zoos range from 23 to 118 acres with 450 to 2,600 specimens, 20 to 80 employees and attendance figures between 200,000 and 4 million. The four zoos responding all had some type of keeper training, three of these were considered poor, one rates super. Five of the six keepers attended these classes.

Through a keeper's eye, a zoo's good features include healthy and varied collections, good breeding success, landscaping and various well-done exhibits, and a good keeper/staff relationship. Bad points include poor animal facilities, overcrowding, few public activities and too much concrete.

Six keepers in four zoos may not be a good cross section of the keepers throughout the country; there is no way of knowing unless I get more replies. Any data from past topics will be gladly collected, and if enough comes in to warrant it, new results will be published. Complete data is available on request.

Please send your data on diets today!

The new question is: How do you keep an Elephant?

How many elephants are in your zoo? _____

How many do you care for? _____

List elephants' name, sex, age and type (i.e. Asiatic or Indian) _____

Describe enclosures in terms of size, type of barriers, pools, time animals spend indoors or out, special restraints if any, special features, bedding if any, number, sex and relationships of animals in each enclosure (i.e. pair, mother/baby, juvenile, etc.) _____

Describe diet _____

Describe training program if any _____

Describe special maintenance such as foot trimming, oiling, etc. _____

How often done; by whom? _____

What would you most like to improve, add or eliminate in the elephant area or routine? _____

I am trying to organize a book of temperatures. The first thing a vet asks is the sick animal's temperature. Ask him what normal is and you usually get a blank stare. Let's help our vets and our animals. If you have any recorded temperatures on animals, please send them to me, including details of the animals' condition (i.e. sick, stressed, relaxed).

Thanks to Mike Dee of the Los Angeles Zoo for the following Baird's tapir temperatures.

A pregnant female: December 15 - 95.0

December 16 - 95.5

December 20 - 99.7

December 21 - Passed Fetus

July 14 - 98.4

July 15 - Still birth

Another pregnancy:

Please send particulars on either the elephants or temperatures to: Pat Sammarco, 5206 N. Ludlam, Chicago, Illinois 60630.



SPECIAL AAZK COMMUNIQUE – by Dick Sweeney

A lot has been happening at AAZK Hq. over the last few weeks. I'd like to bring you up to date on AAZK affairs.

Mr. Ed Roberts, Everett, Mass. is now serving as President of the Board of Directors for AAZK. Ed replaces Ken Kennedy, Vancouver, who resigned because of having left the zoo field. Ken is now working for a furniture outlet in Vancouver, but hopes to return to zoo work in the not too distant future. Mr. Roberts will serve the unexpired term of Mr. Kennedy, then start his full two-year term effective at the 1974 National Conference at Chicago in April.

Mr. Rick Steenberg, St. Paul, Minn., has been appointed to fill the Board vacancy created by the resignation of Mr. Perry Alexander, Fresno, California. Mr. Alexander has been promoted to a staff position at the Roeding Park Zoo in Fresno. Rick has served AAZK as Regional Coordinator and as Chairman of the Awards Committee.

Mr. Dewey Garvey, Editor of "The Keeper" will serve as Board member replacing Ken Kennedy. Dewey, from Brookfield Zoo, is a charter member of AAZK and has been active in National affairs for a number of years.

NOTE: One way to fully realize the value of AAZK is to attend our National meetings. You get to hear some very interesting talks regarding animal care, and an opportunity to see some excellent pictures and movie films. But, most important, you get to meet your fellow zoo personnel and tour the zoo and/or aquarium of our host. In addition to the business conducted, you can enjoy frequent visits to one or more AAZK waterholes (Hospitality) and enjoy the banquet program and hospitality of our excellent Headquarters Hotel.

Once you attend, you're hooked!

Our 1974 Chicago meeting (April 22-25) promises to be the largest conference in our history. We hope our membership is making plans to be there. Don't miss the chance to see three excellent zoos and enjoy the friendship of our hosts in the "windy city".

WE NEED YOUR SUPPORT – INCLUDE IT INTO YOUR VACATION PLANS.

Would you like to present a paper or program at the 1974 AAZK Convention in Chicago? If so, contact me, Denny Grimm at 204 Olmsted Road, Riverside, Illinois 60546.

We are planning to have an "open" convention and will be considering any paper on zoos, zoo-keeping, animal care, and animals in general. Please include topic, approximate length of time, and indicate if you require any equipment (slide projector, chalk board, etc.). We will try to schedule you at a time which will be most convenient.



BEHIND THE GUARDRAIL

Edited by
Larry Sammarco, Lincoln Park Zoo

Editorial Comment:

I would like to personally thank Ken Kawata (Indianapolis), Dee White and Bill Hecht (St. Louis), Ron Kaufman and Chris LaRue (Topeka), and the gang from Brookfield and Lincoln Park for attending the seminar on September 15 in Lincoln Park. The multi-zoo participation made discussion lively, contributing to an enjoyable and profitable evening. This embodied the idea behind AAZK: Cooperation between Zoo Keepers for the common good. This particular time, it was for the sharing of ideas on the Place of Research in Zoos. All attending were not only Keepers, but the staff members that participated did so as fellow professionals, without Chief/Indians pressures. The results were such that all involved would like to see more seminars in the near future.

Anyone wishing to organize a multi-zoo discussion, please send details of time, place and topic to be printed in the KEEPER for maximum turnout.

Please send any and all items of interest about your Zoo, Keepers, Staff and animals to me: Larry Sammarco, 5206 N. Ludlam, Chicago, Illinois 60630.

News from Lincoln Park Zoo

I would like to take this opportunity to welcome another female into the Keeper ranks. Sally Lausch has moved from Zooleader to Animal Keeper, and from the Children's Zoo to the Small Mammal House. And as in the past with our other girl Keepers, she is doing a good job. We now have a total of eight (8) girls at Lincoln Park Zoo.

Congratulations to Grant Strombeck who was recently promoted to Senior Keeper from the ranks of Class II Keepers. Grant has been a Keeper approximately eight (8) years and has worked in various areas of the Zoo, including as a night Keeper.

We continue to have success in breeding Patagonian Cavys, with the birth of two more 1/1 on September 17, 1973.

Another noteworthy birth was that of six (6) Bengal tigers. The sex is unknown at this time due to the fact that the cubs are still with the mother.

News from Indianapolis

Zoo Keeper Pete Siminski has recently completed a five day training session at both the Topeka Zoological Gardens, and the Kansas City Zoo. Pete received in-

structions in Elephant Management. He has been charged with the training and discipline of Alfie, Indianapolis' Asiatic elephant.

(Ken Kawata)

News from Beardsley Park Zoo, Bridgeport, Connecticut

Birth: In July of this year, a baby two-toed sloth was born. The sex has not been determined as the animal is being raised by the mother. It is doing well and was observed eating solid food in mid-August. It is believed that the female was pregnant when she arrived in February of '73, since the male died that same month.

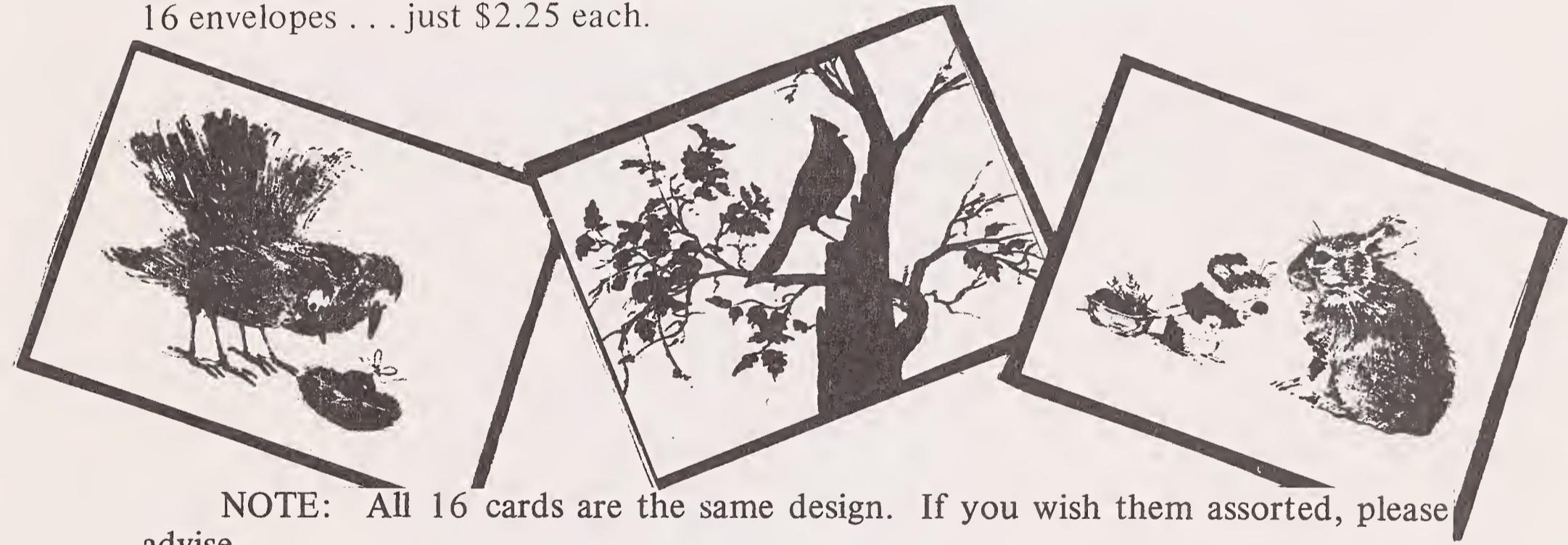
(Bernd Tardy)

News from Topeka Zoo

Jeri Yagello, former zoo management trainee, has accepted the position of Curator of Hoofed Stock at the Kansas City Zoo. Congratulations, Jeri!

LOOKING FOR SOMETHING SPECIAL THIS CHRISTMAS?

Well, AAZK can help you . . . and you can also help AAZK. We have just the kind of Christmas Cards you need. Choose from three brilliantly colored animal designs, each with a special greeting from you. Our cards are packaged 16 cards 16 envelopes . . . just \$2.25 each.



NOTE: All 16 cards are the same design. If you wish them assorted, please advise.

We also have a special series of American Wildlife cards, great for adding your own personal greetings or just giving them as gifts. They depict eight different species in natural color, printed on 100% recycled paper. A package of 8 cards 8 envelopes . . . just \$1.25 each.

OR . . . maybe you need some "everyday greeting cards" with such cheerful notes as "Have A Happy Day", "Thinking of You", "Cheers". Each shows a favorite animal in a favorite pose . . . 8 designs—8 cards—8 envelopes . . . just \$1.25 each.

Send your order today to: AAZK Hq., 8024 Tommy Drive, San Diego, California 92119. Checks or money orders payable to AAZK.

REGISTRATION FOR 1974 TRI-ZOO CONFERENCE

AAZK

April 22nd - 25th

NAME _____

ADDRESS _____

ZOO _____ POSITION _____

I plan to attend:

- | | |
|--|---|
| <input type="checkbox"/> Brookfield Zoo | <input type="checkbox"/> Milwaukee Conservatory |
| <input type="checkbox"/> Milwaukee Zoo | <input type="checkbox"/> Would your wife be interested in |
| <input type="checkbox"/> Lincoln Park Zoo | a special women's tour? |
| <input type="checkbox"/> Cocktail Party, Banquet | (\$15 - if not registered
for entire convention) |

I (and my spouse) plan to arrive on _____
Date _____

CONFERENCE HEADQUARTERS:

Sheraton-Chicago Hotel
505 N. Michigan Avenue
Chicago, Illinois

Registration fee is \$35.00. Please make all checks payable to AMERICAN ASSOCIATION OF ZOO KEEPERS and send to:

Gay Kuester
Brookfield Zoo
Brookfield, Illinois 60513

Photo Contest — Prizes will be given for the best and the funniest picture. If you wish to enter the contest, bring one picture to the conference. Prizes will be awarded at the Banquet.

AAZK booster auction will be held on Banquet night. Bring to the Conference any new item which you will think animal people would be interested in. All proceeds will go for printing "THE KEEPER".

The staff of "THE KEEPER" will publish the Conference booklet and program. If you would like a booster ad, please contact Dewey Garvey, Editor, The Keeper, 186 W. Quincy, Riverside, Illinois 60546. Ads will be \$1.00 for your name and zoo, and \$10.00 for 1/4-page ad in the Conference booklet.

Please send in your conference registration as early as you can!

Brookfield

Lincoln Park

Milwaukee

**1974
AAZK
NATIONAL
CONVENTION**

Something new for 1974. Three zoo hosts will have the pleasure of showing you around. Spend a day at Brookfield Zoo with host Dewey Garvey, Milwaukee Zoo with host Sam LaMalfa, Lincoln Park Zoo with hostess Pat Sass.

Convention Dates: April 22-25

Hotel Headquarters: Sheraton-Chicago, Chicago, Illinois.

Rates are: Single, \$20.00; twin-double, \$26.00; triple, \$31.00; one bedroom suite, \$40.00 and \$5.00 per additional cot.

If you would like to present a paper or other type of program at Chicago, please contact Dennis Grimm, 204 Olmstead Road, Riverside, Illinois 60546.

Besides representing your zoo by attending, plan to have a picture poster of your zoo, to hang in the session room.

Hope to see you at the convention. Watch THE KEEPER for more details and information – 3 and more in '74.

ZOO DIRECTORS - VETERINARIANS - KEEPERS
FOR BALANCED NUTRITIONAL DIETS -
QUALITY ASSURANCE -
AND ECONOMICAL FEEDING PROGRAMS
TRY
NEBRASKA BRAND FELINE FOOD
NEBRASKA BRAND BIRDS OF PREY DIET
WAYNE DRY DIETS

We also offer: NEBRASKA BRAND HORSE MEAT - U.S.D.A. INSPECTED
A PROGRAM TO HELP ZOOS SECURE THEIR OWN FREEZERS.
LET US GIVE YOU DETAILS - PAY AS YOU USE.
AN INFORMATIVE BOOKLET "HELPFUL INFORMATION ON
THE ART OF ANIMAL KEEPING." WRITE FOR COPY.

FOR INFORMATION AND PRICES CONTACT
DUANE A. STROTHER

CENTRAL NEBRASKA PACKING CO.

P.O. BOX 550
NORTH PLATTE, NEBRASKA 69101
Phone (308) 532-1250

A SUBSIDIARY OF ALLIED MILLS, INC., CHICAGO, ILLINOIS

Published by
AMERICAN ASSOCIATION OF ZOO KEEPERS
8024 Tommy Drive
San Diego, California 92119

BULK RATE
U.S. POSTAGE
PAID
BROOKFIELD, ILL.
PERMIT NO. 92